

## EIM Help – Suspended Particulate Matter (SPM) Collected by Continuous Flow Centrifuge

Version 1.1  
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Samples of suspended particulate matter in the water column are obtained by centrifuging a large amount of water from the environment. Water in the environment is pumped from the source into the running centrifuge. Particles in the water are settled out in the centrifuge and the remaining water is discharged. The sediments that remain in the centrifuge after the sampling period are collected for analysis.

Often, water samples are taken at the inlet and outlet (discharge) of the centrifuge in order to assess its sampling efficiency. The chart below shows the required matrix/source combinations for each manner of sampling and their associated sample fractions. The inlet water does not have a sample fraction because it is measuring whole water. Sediments are labeled as suspended because they were suspended in the water column in the environment. Discharge water is categorized as dissolved because the centrifuge should have extracted all suspended particles, leaving only dissolved matter in the outlet water.

Type of Sample	Matrix	Source	Sample Fraction
SPM sediment (from freshwater)	Solid/Sediment	Fresh/Surface Water	Suspended
*SPM sediment (from stormwater)	Solid/Sediment	Stormwater	Suspended
SPM sediment (from marine water)	Solid/Sediment	Salt/Marine Water	Suspended
SPM water (in)	Water	(use appropriate source above for your study)	N/A
SPM water (out)	Water	(use appropriate source above for your study)	**Dissolved

In addition to the standard required fields, the following fields and associated values will be required when entering Centrifuge SPM data into EIM:

### **REQUIRED fields and values for data entry of SPM data collected by centrifuge**

Field Activity Start Date (F)

Field Activity End Date (H)

Field Activity Start Time (G)

Field Activity End Time (I)

Sample Composite Sample (V) centrifuged sediment samples will always be "Y", but water inlet and outlet samples may be composites or single grabs

Sample Method Code 1 (AB) "CENTRIF" (definition: Continuous flow centrifuge composite)

Result Method Code (BH) Enter the method that the lab used to analyze the result

Sample Matrix, Sample Source, and Result Sample Fraction (W, X, BE) *see chart above*

### **Suggested to also include a Field Activity Comment (J):**

SPM collected by centrifugation

Water sample collected at centrifuge inlet

Water sample collected at centrifuge discharge

\*See Stormwater Data Entry Business rule for information on entering stormwater locations.

\*\*The sample fraction for SPM water (out) collected by Centrifuge is not always dissolved. If a study was not concerned about high efficiency of sediment removal then the sample fraction should be "suspended". Studies concerned with high efficiency of sediment removal will test the water (out) for TSS to ensure non-detected values, therefore a true dissolved sample.